

The female, fig. 30, is considerably larger; the specimens vary very much in color, from a dark purplish brown to a warm ochreous red. The fore wings have similar wavy, zigzag lines; the reniform blotch being less distinct than in the male; the inner margin is of a deeper colour, and is

Fig. 30.



thickly coated with short hair, like the head and thorax. The hind wings are similar to those of the male; the under side has the same uniform colour, and the markings and spots as in the male.

The body is the same shade as the wings, the abdomen being a little lighter in colour, and each segment being bordered with a narrow reddish band.

The moths vary in size from two and a half inches in the male to three and a half in the female.

The eggs are deposited on the under side of the leaf, and are described by Mr. Riley as being compressed on both sides and flattened at the apex, the attached end smallest, in colour cream white, with a small black spot on the apical end and a larger orange one on the sides.

TINEINA FROM TEXAS.

BY V. T. CHAMBERS, COVINGTON, KENTUCKY.

A collection of *Tineina* received from Mr. Belfrage, of Waco, Texas, presents some points worthy of mention apart from the descriptions of the new species.

The collection consists of about two hundred and fifty specimens in tolerably good condition, referable to seventy-six species and twenty-seven genera. Such a number of genera and species is evidently typical of the

Tineina of the locality where they were collected. Twenty-nine of these species belong to the genus *Gelechia*, and twenty-five others belong in the same family. Fifty-three of these species thus belong to the *Gelechidæ*, and only twenty three to other genera. The *Gelechidæ* are numerous everywhere, and a preponderance of species belonging to this family is to be expected in almost any collection, but I have not known any other collection in which it was so great as in this one.

The collection contains seven species of *Laverna*, and another species which I have made the type of a new genus very nearly allied to *Laverna*. These seven species differ from each other somewhat as to the neurulation, and also as to the raised tufts on the wings, but perhaps not to any greater degree than do well recognized species of *Laverna*, as e. g. *L. Staintoni* and *L. langiella* of Europe. Mr. Stainton (*Nat. Hist. Tin.*, vii) enumerates only twenty species belonging to this genus, and three others are also known from this country. This collection then contains nearly one-third as many species of this genus as were heretofore known altogether. Of the species heretofore known, but one (if I rightly understand Mr. Stainton) is fairly described as white, that being the prevailing or ground color, though some others have more or less white markings. But of these seven, five may fairly be placed in the white section; and the other two are also strongly marked with white.

The collection contains five species which I have placed in *Butalis*, though with great doubt as to two of them, which are totally unlike all other species of the genus in color, though I have not been able to discover any structural differences whatever.

But it is, perhaps, more remarkable for what it does not than for what it does contain. As before stated, such a collection is typical of the Tineina of the locality where it was collected. Yet it contains no specimen of *Lithocolletis*, which, both in the collections of Dr. Clemens and myself, is the genus next most numerous in species and individuals after *Gelechia*. *Tinea*, *Coleophora*, *Gracilaria*, *Bucculatrix*, *Tischeria* and *Nepticula* are also genera usually numerous in species and individuals. Yet this collection contains only one *Tinea*, two *Coleophora*, no *Gracilaria* (unless a single species of *Coriscum* be held to represent it), and three? species of *Bucculatrix*, one of which is a somewhat aberrant form.

All of the species are new except ten. These are as follows:

Gelechia cercerisella Cham.,

“ *aquæpulvella* “

Ypsolophus eupatoriella Cham.,

Plutella cruciferarum Zell.,

Gelechia disco-ocella Cham." *roseo-suffusella* Clem.,*Hagno faginella* Cham.,*Holocera glandulella* Riley,*Bucculatrix pomifoliella* Clem.,*Hamadryas Bassettella* "

Of these ten species, *G. roseo-suffusella*, judging from the number of specimens in the collection, appears to be by far the more numerous, though it may turn out that some of the specimens do not belong to this species, but to a very closely allied and undescribed one; and all the specimens are of a darker hue than those from the Northern States. This species appears to be distributed nearly all over the United States, and is perhaps the most common species of the genus.

G. cercerisella was originally placed by me in *Depressaria*, and I was led to do this by giving too much importance to the neuration of the wings. It is, however, properly referable to *Gelechia*. The specimens—thirteen in number—belong to a very well marked variety. In all the specimens (a great many) that I have heretofore examined, the fore wings are marked just within the middle of the dorsal margin by some faint, short, ochreous streaks, only discernible distinctly under a lens. In these thirteen specimens these ochreous streaks are not present, and their place is occupied by a larger snow white spot, like those on the margins of the wings.

G. æquapulvella is well represented in the collection, but there appears to be some variation in the shade of the ground color and in the density of the dusting.

The single specimen of *Holocera glandulella* differs from Mr. Riley's description as follows: there is a single discal spot behind the angulated line, and two others at the end of the cell, instead of "two discal spots," as stated by Mr. Riley; besides, "three tolerably distinct, dusky marks around the discal spots" are wanting. Unfortunately I have now no typical specimens of this species, with which to compare it, but I doubt not it is the same.

Hamadryas Bassettella was described by Dr. Clemens from specimens sent to him from Connecticut. He states that it appears to be congeneric with a portion of *Gelechia*. The remark is applicable to almost every species of the family *Gelechidae*. Dr. C. does not seem to have observed its very close relationship to *Dasycera*, nor, perhaps, its still closer relationship to, or even identity with the genus *Pancalia*. The antennae in *Bassettella* are stout, and the ciliation is microscopic, quite distinct in this respect from species of *Dasycera*. The wings of *Bassettella* are narrower

and the form of the secondaries is different, approaching that of *Butalis*. Mr. Stainton's figure (Ins. Brit., v. 3) represents the secondaries of *D. sulphurella* narrower and more pointed than are those of *D. Newmanella*, but less so than those of *Bassettella*. The ornamentation of *D. Newmanella* resembles that of most species of *Butalis*. The ornamentation of *Bassettella* rather resembles that of *Panalia*, to which, also, I think, it makes the nearest approach structurally.

Hagno faginella seems to have the transverse dusky lines of the primaries darker and more distinct than in the Kentucky specimens, and those about the middle of the wing condensed into two indistinct fascia.

Plutella cruciferarum presents nothing unusual; but there is in the collection a single specimen which I incline to consider an undescribed species. In it the lighter color of the inner margin projects into the darker part of the wing only once, and that very faintly, behind the middle of the wing; otherwise the line between the two colors is nearly straight: the markings in the posterior portion of the costal half of the wings also differ somewhat from those of *P. cruciferarum*. But the specimen is imperfect, and I shall not at present separate it from *cruciferarum*. From an examination of my collection of *cruciferarum*, I concur with Mr. Stainton's suggestion that *P. mollipedella* Clem. is the female of *P. cruciferarum*.

The new species are as follows:

AMADRIA? Clem.

A. Clemensella. *N. sp.*

Yellow; the palpi are a little paler, except the outer surface of the second joint. Primaries with minute brown spots arranged in transverse rows; these require close observation: one spot on the fold and one on the end of the disc, a little larger than the others. *Al. ex.* $\frac{1}{2}$ inch. There is also a row of small fuscous spots around the base of the ciliae.

TINEA.

T. obscurestrigella. *N. sp.*

Dark fuscous; the primaries obscurely mottled with sordid yellowish; there is a row of indistinct yellowish spots or streaks on the costa, from the middle to the tip, and along the base of the dorsal ciliae. *Al. ex.* $\frac{1}{3}$ inch. Season, October.

ANESYCHIA.

A. multipunctella. *N. sp.*

Second joint of the palpi dark brown, tipped beneath with scattered white scales, and with a few scattered white scales above; third joint white, tipped beneath at the base with dark brown; face black; vertex white, with a central black spot; antennae fuscous; thorax white, with six black spots, one of which is placed close to the base of the wings and is continuous with the dark brown of the wings; two others on top, and one on each side a little before the tip. Primaries shining dark brown or black, with a wide white streak extending along the dorsal margin from the base nearly to the tip, and a white costal spot close to the tip; there is a sinus, or projection of the white into the dark brown portion, just before the middle, and from thence to the tip the line between the two colors is irregular, with another sinus behind the middle; there is a small black spot in the white at the first sinus, and six others along the dorso-apical margin at the base of the ciliae, and another in the costal white spot, or more properly, perhaps, there are three in the costal white spot, two of them being confluent with the dark brown color around it; ciliae white, except at the tip. *Al. ex.* $1\frac{2}{3}$ inch. Season, April and May. In nine specimens I detect no variation.

A. mirusella. *N. sp.*

Palpi pale yellowish ochreous; the second joint has two brown spots on its outer surface, that nearest to the base being largest; the third joint has the base and tip dark brown. Head pale yellowish or nearly white; antennae pale fuscous; thorax pale yellowish ochreous, with four brown spots, two of which are about the middle and one on each side near the tip. Primaries white, faintly tinged with ochreous yellow, and with a rather wide golden brown basal streak, which begins near the costa and diverges thence to the end of the cell, and from thence narrows and becomes more diffuse towards the apex, which it does not quite attain. The costal whitish portion is more streaked and suffused with ochreous than the dorsal portion, which has a small brown spot before the middle; there is likewise a row of small brown spots around the apex, at the base of the ciliae. *Al. ex.* $1\frac{1}{8}$ inch. Season, April and May.

I have not examined the neuration, and the ornamentation is unusual in the genus; but the other characters are those of *Anesychia*.

HARPALYCE, *gen. nov.*

In the neururation, and more decidedly in the form of the secondaries, this genus makes a very near approach to the *Tortricide*. The hind wings are as wide as in any genus of that family. The primaries, however, rather resemble those of the genus *Ilagno*, and the palpi also ally it to the *Gelechiide*.

Wings nearly horizontal (in the dead insect).

In the primaries the costa is regularly arched, and the wing is widest about the middle ; the costa attains the margin behind the middle ; the cell is rather narrow ; the subcostal gives off four branches to the margin before the end of the cell, the first and longest of which arises before the middle, and the last of which arises close to the end of the cell, and reaches the costal margin close to the apex ; the apical branch reaches the apex or the margin close to and beneath it ; the discal vein gives off two branches ; the median gives off, close to the end of the cell, a single branch, which becomes furcate, and the apical branch runs to the margin, parallel to the discal branches ; the fold is thickened at the end, and the submedian vein is long and furcate at the base.

The secondaries are at least one-half wider than the primaries, their width being equal to about two-thirds of the length ; the costa is strongly arched near the base, and *very* faintly sinuate before the apex, which is rounded, and the dorsal margin *very* faintly sinuate beneath it ; the costal vein is sinuate from the margin and almost coincident with the subcostal towards the base, and attains the margin near the apex ; the cell is wide ; the subcostal is furcate behind the cell, with the superior branch delivered to the apex ; the discal vein is curved or angulated, the angle pointing towards the base, and *near* the median it is again angulated, the angle pointing backwards, and a branch proceeds from it to the margin ; the median sends a branch from behind the middle to the margin, and from the origin of the branch bends up to its union with the discal, at which it becomes furcate. Submedian and internal veins distinct. In one of the species (*canusella*) the costa is not so much arched, and the posterior margin not at all sinuate beneath the apex, and the discal vein is curved (not angulated) and unites with the median without forming a second angle, what I have described as the discal branch vein, being continuous with the median and arising from a common origin with the furcate branch.

Tongue rather short ; maxillary palpi minute ; labial palpi simple, slender, slightly overarching the vertex, the third joint about half as long as the second, and pointed ; antennae simple, more than half as long as the primaries, with the basal joint short and a little enlarged ; scales of the posterior portion of the vertex a little roughened, but not forming a tuft ; eyes globose, of moderate size ; ocelli, none.

H. tortricella. *N. sp.*

Yellowish or straw color ; head and hind wings paler, nearly white ; there is a minute, pale brownish spot at the end of the disc. *Al. ex.* $\frac{3}{4}$ inch. Season, May.

H. albella. *N. sp.*

White ; a minute, indistinct, ochreous spot at the end of the disc, on the forewings, and a very few widely scattered dark brown scales. There is a brownish, ochreous streak on the outer surface of the second joint of the palpi. *Al. ex.* $1\frac{1}{2}$ inch. Season, June, July and August.

H. canusella. *N. sp.*

Pale grayish, almost white, with obscure patches of very pale fuscous on the primaries ; a small brown spot within the dorsal margin, before the middle ; another a little behind it on the fold, and another at the end of the disc. At the beginning of the ciliae is an obscure, narrow, curved, pale fascia, which is very concave towards the base of the wing. *Al. ex.* $1\frac{9}{16}$ inch.

GELECHIA.

G. thoracealbella. *N. sp.*

Second joint of the palpi brush-like, the brush spreading and faintly divided ; third joint slender, more than half as long as the second.

Palpi whitish, the second joint ochreous brown at the base, and the scales of the brush tipped with ochreous yellow ; face, head, and a wide streak from the head to the apex of the thorax, white. Antennae, sides of thorax over the wings, and the primaries brown, the primaries very faintly streaked with whitish towards the apex. *Al. ex.* $1\frac{9}{16}$ inch.

G. minimaculella. *N. sp.*

Second joint of palpi brush-like ; third more than half as long as the second.

Head and palpi ochreous yellow ; palpi with the base of the second joint, a spot on its outer surface, near the tip, and a ring around the third joint, near the tip, dark brown ; antennæ dark brown ; thorax brownish ochreous above, except the sides just above the wings, which are dark brown like the primaries, and, like them, faintly tinged in some lights with a bluish cast. Near the base of the primaries, extending from the costa to the fold, is a narrow, irregular, interrupted, somewhat oblique ochreous yellow line or series of small spots ; there are three or four minute ochreous yellow spots on the disc, and a spot of the same hue about the beginning of the dorsal ciliae, and an opposite costal one. *Al. ex.* $\frac{3}{4}$ inch.

G. ochreosuffusella. *N. sp.*

Second joint of the palpi brush-like ; third joint about half as long as the second.

Insect dark brown ; second joint of the palpi above sprinkled with white or pale yellow scales ; third joint ochreous or yellowish, except at the base and a narrow annulus before the middle, which are dark brown ; head ochreous, densely dusted with dark brown, so as almost to obscure the ground color ; thorax, base of the wings, and a streak along the fold suffused with reddish ochreous ; primaries sparsely dusted with whitish and with a reddish ochreous streak at the base near the costa, as well as that on the fold, and with the costal and dorsal spots faintly indicated. The white dusting of the primaries is sometimes very distinct, and it forms an interrupted fascia or rather a line of small specks across the wing, just before the ciliae. *Al. ex.* $\frac{3}{4}$ inch.

G. depresso-strigella. *N. sp.*

Second joint of the palpi brush-like ; third joint about half as long as the second.

Brown, with a grayish ochreous tinge, the wings streaked with ochreous and the palpi sprinkled with whitish scales. Thorax, basal portion of the wings, and a streak along the fold suffused with reddish ochreous ; four very indistinct, oblique, dark brown lines extend along the disc, and the spaces between the veins in the apical part of the wing are each marked with a similar line, and all of these lines appear to be depressed or sunken below the general surface of the wing. *Al. ex.* $\frac{3}{4}$ inch. Season, July, August and September. It resembles the preceding species, but the

brush is smaller, color of the head and palpi different, and the narrow longitudinal depressed brown lines separate it from that species.

G. pallidagriscella. N. sp.

Second joint of the palpi brush-like; third joint about half as long as the second.

Palpi and head whitish, almost hoary. Pale yellowish gray, a little suffused with ochreous on the thorax and primaries. There is a minute rust red spot about the middle of the disc; extreme costa dark brown at the base; antennae dark brown. *Al. ex.* $\frac{3}{4}$ inch.

G. quadrimaculella. N. sp.

Third joint of palpi longer than the second; palpi not at all brush-like.

Dark brown, in some lights tinged with ash gray; a small dark brown spot on the fold within the basal fourth of the primaries; another also on the fold about the middle; another near it, about the middle of the disc, and another at the end of it. *Al. ex.* $\frac{5}{8}$ inch. Season, May. The brown spots are very indistinct, differing but little from the general hue.

G. Wacoella. N. sp.

Second joint of palpi with a small brush; third about as long as the second.

Ochreous, sprinkled above with dark brown; third joint dark brown; head and thorax dark brown, with a faint ochreous tinge. Primaries dark brown; two ochreous spots on the costal margin near the base, another at the beginning of the ciliae, and two small spots of the same hue on the fold before the middle. *Al. ex.* $\frac{9}{16}$ inch.

G. crescentifasciella. N. sp.

Palpi not brush-like; third joint about as long as second.

Ash gray, microscopically dusted with brown; there is a crescentic, very indistinct pale fascia at the beginning of the ciliae, very concave towards the base of the wing; one or two minute dark spots on the disc, and one at its apex. *Al. ex.* $\frac{1}{2}$ inch. Season, April and May. It resembles *G. quadrimaculella*, but is smaller and of a more ashen hue. Sometimes the fascia is absent.

G. pullusella. N. sp.

Palpi slender, simple; third joint more than half as long as the second.

Brown, microscopically sprinkled obscurely with whitish scales. *Al. ex.* $\frac{1}{16}$ inch. Season, August.

G. plutella. *N. sp.*

Palpi simple, slender; third joint more than half as long as the second, and pointed.

Face and palpi white; vertex pale yellowish, with a dusky central spot; antennae pale yellowish; patagia and costal half of the primaries, almost to the tip, creamy white; thorax and dorsal half of primaries and the tip dark brown; the whitish portion of the primaries is widest at the base, and the dark brown portion at the apex, and the whitish part sends two short, oblique projections into the brown one just before the middle and the other just behind it. *Al. ex.* $\frac{1}{2}$ inch. Season, August.

The ornamentation of the wings bears considerable resemblance to that of *Plutella cruciferarum*, except that the colors are reversed.

G. scella. *N. sp.*

Second joint of the palpi thickened beneath towards the tip, but not at all brush-like; third joint more than half as long as the second.

Head yellowish white, sometimes with a wide longitudinal brownish streak on the vertex. Palpi very pale yellowish, with the second joint externally brown and internally streaked or sprinkled with brown, and the third joint, with the tip and a band around the middle, dark brown. Thorax and primaries pale ochreous gray; under the microscope pale ochreous yellow, somewhat dusted with fuscous. There is a velvety dark brown spot on the fold, not far from the base, behind which is usually a dark brown dorsal streak, extending more than half across the wing, perpendicular to the margin, placed before the middle, but sometimes it is represented only by a triangular spot on the fold, and which does not touch the margin; and there is another small spot of the same hue at the end of the cell, and surrounded by a paler annulus; base of the costal margin and six or seven small spots along the costa dark brown, the last of which is just before the ciliae; and there is a narrow ochreous basal streak just within the costal margin; occasionally the spots along the costa are absent. *Al. ex.* $\frac{1}{2}$ inch. Season, July and September. It is a handsome species.

G. trimaculella. *N. sp.*

Second joint of the palpi scarcely thickened beneath; third half as long as the second; acuminate.

Head, antennae and palpi pale yellowish white; third joint of the palpi tinged with fuscous. Thorax and primaries very pale ochreous yellow (under the lens sparsely and minutely dusted with pale reddish ochreous scales); two small, nearly circular, blackish spots before the middle, one beneath the fold, the second on the disc, a little behind the first one; and a larger one of the same hue at the end of the disc, and a row of minute, dark brown spots around the base of the ciliae. *Al. ex.* $\frac{1}{2}$ inch. Season, April and May.

G. elegantella. N. sp.

Second joint of palpi scarcely thickened beneath; third more than half as long as second.

Palpi white; second joint yellowish towards the tip, the third with three brown annulations, one at the base, one before the middle, and one before the tip, sometimes connected by a line along the under surface; head and thorax sordid white or yellowish, slightly iridescent; base of the primaries white, iridescent, narrow, but wider on the dorsal than on the costal margin; this is followed by an oblique, ochreous or yellowish orange band, which crosses the wing and is margined with brown before and behind, and followed by an oblique white band, which also crosses the wing, and is rather widely margined behind by an iridescent, brown line, terminating at a smooth tuft of raised scales on the dorsal margin, the tuft or rather smooth elevation being metallic and highly iridescent, as also are the brown margins of the ochreous bands; the dark brown, posterior margin of the second brown fascia is produced backwards along the disc and passes backwards along the disc, inclining towards, but not reaching the base of the dorsal ciliae, and containing three smooth, metallic elevations, like the one on the dorsal margin, the wing between it and the costa being white, and between it and the dorsal margin the wing is white and pale ochreous. The oblique streak terminates just before the dorsal ciliae at a curved fascia, which is very convex towards the base, is reddish ochreous on the dorsal margin, and brown on the costal margin. This curved fascia is followed by an oblique one, which is nearest to the tip on the costal margin, and the costal portion of it is wide and white, and the dorsal portion brown, and in some lights is brilliant metallic; the brown portion is narrow where it meets the white costal portion, and passes

around behind it to the costal margin, and thence curves as a narrow line backwards around the apex at the base of the ciliae, returning to its origin on the dorsal margin, thus enclosing an oblong, egg-yellow or golden patch, parallel with the base of the dorsal ciliae. In some lights this fascia is dull brown, not at all metallic, and the yellowish ochreous parts of the wing become almost brick red; and, in truth, all the colors of the wing, except the dark velvety brown streak which passes obliquely the disc, are so variable that it is very difficult to give an adequate or intelligible description of the insect. The ciliae are fuscous. *Al. ex.* $\frac{3}{8}$ inch. Season, May, August and September. I have also received it from Miss Murtfeldt, from St. Louis.

This species belongs to the same group with *G. roseo-suffusella*, &c., and is the prettiest *Gelechia* that I have seen.

G. rufusella. *N. sp.*

Second joint of the palpi somewhat thickened beneath before the apex (nearly as in the European G. populella); third joint a little longer than the second.

Palpi white; second joint externally dark brown at the base. Head, thorax and base of the primaries yellowish white, with a faint reddish tinge, which gradually deepens and becomes more distinct as it passes backwards over the wings, and about the basal one-fourth becomes bright brick red, and continuing to deepen, becomes tinged with fuscous at the apex. Antennae brown, annulate with pale yellow. *Al. ex.* $\frac{1}{2}$ inch. Sometimes the primaries are sparsely dusted with brown. Season, September.

G. costa-rufocella. *N. sp.*

Second joint of the palpi clavate, not brush-like, brown, tipped with yellowish; third joint pale yellowish. Antennae brown; head, thorax, base of the primaries, and costal margin to beyond the middle, rufous; the remainder of the primaries brown, with four small yellow spots, two of which are on the fold, and two on the disc, and a fifth small one at the beginning of the costal ciliae; ciliae brown, pale at their base. *Al. ex.* a little over $\frac{1}{2}$ inch. Season, September.

G. subruberella. *N. sp.*

Labial palpi, with the second joint of the palpi, a little thickened before the tip, as in rufusella.

Pale ochreous, faintly tinged with rufous, streaked and blotched with brick red along the base of the dorsal ciliae; a minute rufous spot on the fold, and a circular brown one at the end of the disc, with a small one before it. *Al. ex.* $\frac{1}{2}$ inch. Season, October. Very near to *rufusella*, perhaps a variety. The palpi are precisely as in that species as to form and colors, but the general hue is much paler.

G. maculimarginella. *N. sp.*

Second joint of the palpi a little brush-like, yellowish, dusted with dark brown; third joint dark brown, with extreme tip and a few scattered scales white: about as long as the second. Antennae dark brown; head pale ochreous yellow and brown; thorax and primaries dark gray brown, spotted with darker colors; one of the spots is on the costa near the base, and there is a small yellowish spot before it and another behind it, and beyond that is another of the dark spots; there is a dark spot on the fold, with a small yellowish one before it; a small dark spot about the centre of the disc, without any yellow spot before it, and about the end of the disc is another dark spot, with a small yellow one before it. There is a pale yellowish streak at the beginning of the costal ciliae, and an opposite dorsal one. *Al. ex.* $\frac{1}{2}$ inch. Season, July.

G. argenti-albella. *N. sp.*

Second joint of the palpi scarcely thickened beneath; the third more than half the length of second.

Silvery white; each joint of the palpi has a dark brown annulus before the tip; there are a few blackish scales over the base of the antennae, which are annulate with brown; a small dark brown spot on the extreme costa at the base, followed by three others within the margin, and there is also a small one within the dorsal margin near the base; there is a transverse brown spot or line on the fold, and another at the end of the disc, a brownish fascia at the beginning of the ciliae, and a brownish golden streak around the apex at the base of the ciliae. *Al. ex.* $\frac{7}{16}$ inch. Season, June. A rather pretty and distinctly marked species, like *G. variella*, but I think it is quite distinct from it.

G. bidiscomaculella. *N. sp.*

Pale ochreous, becoming a little deeper towards the apex of the primaries; there is a small brown spot about the middle of the disc,

another at its end, and a brown streak along the base of the costal ciliae. *Al. ex.* $\frac{3}{8}$ inch. Season, July. I have but a single specimen, and in it the palpi are missing. Allied to *subalbusella*; perhaps a variety of it.

G. subalbusella. *N. sp.*

Second joint of the palpi not thickened.

Creamy white, sparsely dusted with ochreous yellow and brown. *Al. ex.* $\frac{3}{8}$ inch. Season, July.

G. parvipulvella. *N. sp.*

Palpi simple.

Pale yellowish white, lightly dusted with fuscous, the dusting more dense towards the apex of the primaries. *Al. ex.* $\frac{3}{8}$ inch. Season, May and August. Possibly a variety of *G. subalbusella*.

G. lavernella. *N. sp.*

Second joint of the palpi a little thickened beneath towards the apex; third joint rather thick.

Palpi ochreous, with the basal half of the second joint and a band before its tip, dark brown; an annulus before the middle of the third joint, and another wide one before its tip, dark brown. Thorax and primaries gray; base of the costal margin dark brown, and from it a narrow, oblique, dark brown streak crosses the wing to the dorsal margin, in its course crossing almost at right angles an indistinct brown line which proceeds from a brown spot on the costal margin, and passes obliquely forwards nearly to the base of the wing; and at the intersection of the lines the brown color spreads around them, forming another spot; these lines are irregular, and in some parts indistinct; behind these lines the wing is densely dusted with fuscous to the tip, and a brown fascia is well indicated at the beginning of the ciliae. *Al. ex.* $\frac{1}{2}$ inch. There is something in the clumsy looking palpi and general appearance which reminds one of a *Laverna*.

G. ciliolineella. *N. sp.*

Only microscopically distinguishable from *G. solaniella*. Ochreous, tinged slightly with grayish; there is an indistinct brownish spot on the fold, and another a little behind it on the disc, and another in the apical part of the wing. Costal ciliae whitish, and a narrow, indistinct, white

line at their base, and one also at the base of the dorsal ciliae, and three dark brown hinder marginal lines in the apical ciliae. *Al. ex.* $\frac{1}{2}$ inch.

G. minimella. *N. sp.*

Palpi simple.

Insect dark brown, indistinctly sprinkled with white. *Al. ex.* $\frac{3}{8}$ inch. The neuration is nearly that of *Cleodora*.

ANARSIA.

A. suffusella. *N. sp.*

Ochreous yellow, somewhat suffused with fuscous. Outer surface of the second joint of the palpi dark brown, tipped with ochreous; third joint pale yellowish. The third joint of the palpi is more slender than in *A. pruniella* Clem., and the fascia is narrower. *Al. ex.* $\frac{3}{4}$ inch. Season April.

A. trimaculella. *N. sp.*

Outer surface of the second joint of the palpi dark brown, except at the apex of the tuft, where it is whitish; third joint yellowish. Head pale ochreous; head and thorax pale ochreous, densely dusted with fuscous. Primaries ochreous, suffused and dusted with brown; a small dark brown spot on the fold before the middle; one a little larger at the middle of the disc, and one at its end, and some scattered dark brown scales along the base of the dorsal ciliae, near the apex. *Al. ex.* scarcely $\frac{1}{2}$ inch.

NEDA, *gen. nov.*

This genus is between *Anarsia* and *Cleodora*. It is an *Anarsia* in all but the hind wings, which are those of *Cleodora*, both in form and neuration.

Head smooth, convex; ocelli, none; antennae minutely denticulate; tongue moderate, scaled; labial palpi moderate, second joint with a projecting tuft at the apex; third joint smooth, ascending in the ♀ (all my specimens are ♀.) Primaries lanceolate, ciliae moderate; the costal vein attains the margin before the middle; the cell is narrow and pointed; the first branch of the subcostal is given off before the middle, and there are two other branches towards the end of the cell; the apical branch is

furcate on the costa before the tip, and has almost a common origin with the apical branch of the median at the end of the cell; the median has three branches behind the middle, and the submedian is furcate at the base. The secondaries are pointed, scarcely as wide as the primaries, with the dorsal margin deeply excavated beneath the tip; the costal margin is excavated from the basal third to the tip; the costal vein attains the margin about the middle; the subcostal is straight to the end of the cell, and thence bends a little upwards to the apex; the cell is very wide; the discal vein oblique, with two branches to the dorsal margin, the upper branch arising close to the subcostal, and the second continued faintly through the cell to the base; the median is trifurcate behind the middle, the first branch remote from the others; the submedian distinct; internal obsolete.

N. plutella.

Third joint of palpi and upper surface of the second one creamy white, the second otherwise dark gray brown; head, thorax and the dorsal margin of the primaries to a point beyond the beginning of the ciliae, creamy white, the primaries otherwise dark gray brown, except that the *extreme* costa is creamy white and the costal margin is obscurely streaked with the same hue. Ciliae of primaries creamy white, except at the apex. *Al. ex.* $\frac{1}{6}$ inch. Season, September. The ornamentation reminds one of a *Plutella*.

CLEODORA.

(No species of this genus has heretofore been described from the U. S. or Canada.)

C. pallidastrigella. *N. sp.*

Palpi pale yellowish; a spot on top of the third joint, and the brush on the second joint reddish ochreous. Thorax and primaries pale orange; paler, nearly white, along the dorsal margin, and on the extreme costa beyond the middle; a narrow, indistinct, whitish line along the fold, ending at a small brown spot; there is an oblique, narrow, whitish streak along the base of the costal ciliae, continuous with the white of the extreme costa, and there is a short one along the base of the dorsal ciliae; a minute brownish spot surrounded by a pale ring at the end of the disc, and an oblique brownish streak in the ciliae at the apex. The brown spots are all indistinct. *Al. ex.* $\frac{3}{8}$ inch.

The neururation of the primaries differs from that of *C. cytisella*, as figured by Mr. Stainton (*Ins. Brit.*, v. 3), by having a branch from the apical vein to the costal margin, just before the vein becomes furcate, and that of the secondaries differs from it by having a single branch from the discal vein, and the subcostal furcate beyond the cell, or rather the superior branch of the discal is united with the subcostal at the cell. Nevertheless, I have no doubt that this species and the following are properly placed in this genus.

C. pallidella. *N. sp.*

To the naked eye this species appears very pale gray, almost white ; under the lens it appears pale ochreous gray, with minute and indistinct pale fuscous specks ; there is a fuscous streak along the upper surface of the second joint of the palpi, and the antennae are annulate with fuscous. *Al. ex.* $\frac{3}{8}$ inch. Season, August.

Mr. Stainton, in a foot note on page III of his edition of the Clemens papers, doubts whether *Anorthosia* Clem. ought to be separated from *Cleodora*. But the two genera differ decidedly in neururation, and the palpi of *Anorthosia*, as figured by Dr. Clemens, are very different from those of *Cleodora*, as figured by Mr. Stainton (*Ins. Brit.*, v. 3). On the other hand, the palpi of *Anorthosia* resemble more closely those of my genus, *Sagaritis*. In both the tuft rises above the palpal joint, instead of spreading around it, as in *Cleodora*, and in those genera the tuft is composed of long scales, whilst in *Cleodora* it is clothed with stiff, bristle-like scales. In *Anorthosia* the tuft is figured largest at the base of the joint, whilst in *Sagaritis* it is largest towards the apex. The terminal joint in Dr. Clemens' figure is represented shorter relatively to the third than it is in either *Sagaritis* or *Cleodora*. In both these genera the cell is closed in both wings, while in *Anorthosia* it is open. There are also other differences both in the form and neururation of the wings. *Sagaritis* is quite distinct from *Cleodora* in the more elongate and slender body and legs, and more graceful appearance, as well as in the form and neururation of the wings.

NOTHRIS.

N. grisella. *N. sp.*

Tuft large, but not projecting beyond the end of the joint, its anterior and inferior margins forming almost a right angle with each other ; the

terminal joint of the palpi is nearly as long as the second, recurved; tongue rather scantily and roughly scaled at the base, the scales laterally projecting. Having but a single specimen, I have not examined the neuration, but the palpi are nearly those of *N. vecharcella*, as figured in *Ins. Brit.*, v. 3, than to any other genus known to me.

Pale gray; basal half of the second joint of the palpi dark brown on the outer surface; tip of third joint dark brown; basal joint and annulations of the stalk of the antennae brown. There is a rather short dark brown line on each side of the thorax above the wings. Primaries with the extreme costa at the base, and the inner angle, dark brown, and the base towards the dorsal margin suffused with faint reddish yellow; the disc from the base nearly to the middle is suffused with brown, and there are faint brownish streaks between the veins in the apical part of the wing. *Al. ex.* $\frac{3}{4}$ inch.

HOLOCERA.

H. Clemensella. *N. sp.*

H. chalcofrontella Clem. is so variable a species that it is possible this may be a variety of it; but it is not one of the described varieties.

Whitish, dusted lightly with dark purplish brown, the dusting dense on the second joint of the palpi. There is a purplish brown patch at the base of the costa, a small one about the middle of the costa, a small one opposite to it on the fold, a small one on the disc opposite the space between the other two, one at the end of the disc, and a row of small dots around the apex at the base of the ciliae. *Al. ex.* $\frac{1}{2}$ inch. Season August.

POLYHYMNO, *gen. nov.*

The two insects for which I erect this genus are possibly not congeneric. *P. luteostrigella* is a slender, elongate insect, whilst *P. sexstrigella* is rather robust; there is but a single specimen of the latter species, and the head of that is wanting, though it is otherwise perfect. The form and neuration of the secondaries is very nearly the same in both, and so is the form of the primaries, except that those of *sexstrigella* are a little wider. The generic diagnosis is that of *luteostrigella*. The points in which *sexstrigella* differ from it are noticed under that species. The form of *luteostrigella* and the markings of the wings in both species are suggestive

of affinities with *Gracilaria*, especially the short streaks at the apex of the primaries, reminding one of the "hook" in some species of that genus. The palpi are rather suggestive of relation to *Cosmopteryx* or *Stathmopoda*, but the form and neururation of the wings place it beyond doubt in the *Gelechiidae*, though the caudate primaries are peculiar.

No maxillary palpi; labial palpi recurved, very long and slender, with the third joint longer than the second, and pointed; tongue long, scaled at the base; forehead convex; face broad; scales of the head and face appressed; basal joint of the antennae small, scarcely distinguishable from the stalk, which is long and slender.

Primaries lanceolate, narrow, caudate, the costal and dorsal margins both being excised before the tip, behind the cell, the dorsal margin deeply so, and the extreme tip is a little hooked backwards. The costal vein is short, cell narrow; the subcostal gives off two branches, both behind the middle, the first remote from the second, which is at the end of the cell; and the apical branch is furcate behind the cell, both branches going to the costal margin. The discal vein gives off a single branch, which goes to the dorsal margin, and the median is four-branched, all four at or near to the end of the cell; the submedian is furcate at the base.

The secondaries are deeply emarginate beneath the apex, which is a little hooked backwards; the subcostal gives off a long branch from before the middle, and is furcate, with one branch to the costal and the other to the dorsal margin before the tip; the cell is unclosed, and the independent discal branch arises at the median, which is three-branched, the first one being before the middle and remote from the others. They are about as wide as the primaries.

The neururation of the secondaries allies this genus to *Trypanisma* Clem., *Taygete*, *Evippe*, &c., Cham.

P. luteostrigella. *N. sp.*

Silvery white; ciliae pale stramineous; upper surface of the thorax, with four narrow, equidistant, longitudinal, golden yellow lines. Primaries with three similar golden yellow lines extending through the entire length of the wings; one of these is placed just within the dorsal margin, and is continuous with one of the central thoracic lines, but the line is very indistinct, becoming more distinct towards the apex; another of the lines on the wing is continuous with one of the lateral thoracic lines, is very

distinct, becomes furcate on the disc, one branch going to the extreme apex and the other towards the dorsal margin at the beginning of the ciliae, where it becomes confluent with the first mentioned line, but immediately separates from it again, the two lines continuing on parallel to each other around the base of the dorsal ciliae to the apex. The third line begins on the costa at the base, and runs just within the costal margin nearly to the apex, where it becomes confluent with the second or apical branch of the second or median streak. In the apical part of the wing are three golden costal streaks, which become confluent with the second and third longitudinal lines, and point obliquely backwards, the first being rather remote from the other two; behind these three streaks is a fourth one, perpendicular to the margin; behind this is a fifth, pointing obliquely forwards, and behind this again two short curved ones, pointing forwards, one at the apex and the other close to and before it. There are two distinct, though small black spots in the dorsal ciliae. *Al. ex.* $\frac{3}{8}$ inch. Season, August.

Polyhymno? sexstrigella. N. sp.

As already stated, the head is missing in the single specimen which I possess of this species, and the primaries are wider, decidedly so in proportion to their length, being a little wider than the secondaries, and the costal margin before the tip is not so decidedly scalloped; the tip is not hooked backwards; the apical branch of the subcostal is not furcate; there are three branches before it, instead of two. as in *luteostrigella*, but the last one has almost a common origin with the apical, and the median is only three-branched, instead of four.

The secondaries are the same, except that in this species the long branch of the subcostal (the first branch) is absent.

The insect is more robust than *luteostrigella*.

Iridescent fuscous, in some lights silvery. About the middle of the primaries is an oblique, wide, silvery white costal streak, of irregular outline, reaching the fold, pointing obliquely backwards, divided in part by a narrow yellowish line, which passes back along the middle of the wing to the second costal streak, the wing above and below it being dark fuscous, somewhat iridescent; the second costal streak is white and placed behind the middle; opposite to it is a white spot, just within the dorsal margin; the second streak is dark margined behind, and the dark margin is produced backwards as a line along the centre of the apical part of the wing, but does not quite reach the apex, and nearly opposite its end are two

small, straight, silvery white costal streaks, both dark margined behind and close to each other; behind these two streaks are two others, also close together, the last one at the apex and both dark margined behind. The apical part of the wing (behind the second costal streak) is golden yellow, sprinkled towards the dorsal margin with brown. Ciliae silvery fuscous, with a wide, dark brown hinder marginal line. *Al. ex.* $\frac{3}{8}$ inch. Season, July.

In the form and neuration of the wings, and in the disposition of the costal streaks it *approaches luteostrigella*; whether it does in the palpi and antennae remains to be seen.

Since the above remarks were written, I have received from Mr. Belfrage more perfect specimens, and find the palpi and antennae as in *luteostrigella*. It may be necessary to amend the specific description a little hereafter.

(To be Continued.)

ON A NEW SPECIES OF CERAMICA.

BY H. K. MORRISON, CAMBRIDGE, MASS.

Ceramica rubefacta (nov. sp.)

Expanse, 41 m. m.; length of body, 20 m. m.

Eyes hairy; collar and thorax reddish brown; the thorax of my only specimen was injured in capture, so that the presence, or if present, the size of the tufts could not be ascertained. But apparently it was tufted, as there are traces of a meta-thoracic elevation. Abdomen yellowish, with a strong basal tuft; the labial and anal tufts tinged with carneous; beneath red; anterior wings deep uniform red; lines obsolete; nervules distinctly black; a white dot on the costa at the base; the interior line is only represented by a white dot on the costa and on the subcostal, median and submedian nervules. The orbicular is blackish, small, oblique and with a grayish centre, situated close to the reniform, and at more than the usual distance from the base; reniform vague and blackish, with a gray